

**Listing of Claims:**

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1-5. Cancelled.

6. (Twice Amended) A system comprising:

a ductal access tool sized for accessing a breast duct and collecting a ductal fluid sample including ductal epithelial cells from within the breast duct; and

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an aliquot of a bioactive composition for applying to a nipple surface, said composition comprising [at least two of the following: an orifice-dilating agent, a vaso-dilator, a muscle-relaxing agent, a muscle-constricting agent,] a lactation-stimulating agent[, a secretion-stimulating agent, a sphincter-relaxer, an anti-ischemic agent, a calcium channel blocker,] and at least one of the following: a dye or stain to mark the nipple surface excluding ductal orifices, a dye or stain to mark a perimeter of a ductal orifice, and a dye or stain to mark a ductal orifice.

7. (Original) A system of claim 6, wherein the formulation comprises a powder, a viscous semi-fluid, a foam, a gel, a liquid, or a gas.

8. (Previously Amended) A system as in claim 6, further comprising a pad having a geometry sized to circumscribe a breast nipple and enclose a bioactive agent in contact with a nipple surface and cover the nipple surface so that the bioactive agent can act on the nipple surface.

9. (Twice Amended) A system comprising a ductal access tool sized to be introduced into a breast duct [for collecting] and collect a ductal fluid sample including ductal epithelial cells from within [a] the breast duct and a composition capable of coating a tip of the ductal access tool to contact a ductal orifice, said composition comprising at least [two of the following: an orifice-dilating agent, a vaso-dilator, a muscle-relaxing agent, a muscle-constricting agent,] a

lactation-stimulating agent[, a secretion-stimulating agent, a sphincter-relaxer, an anti-ischemic agent, a calcium channel blocker,] and at least one of the following: a dye or stain to mark the nipple surface excluding ductal orifices, a dye or stain to mark a perimeter of a ductal orifice, and a dye or stain to mark a ductal orifice.

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cancelled

10. (Twice Amended) A system comprising a ductal access tool sized to be introduced into a breast duct and collect a ductal fluid sample including ductal epithelial cells from within the breast duct, said ductal access tool being preloaded with a solution comprising an anesthetic for infusion into an accessed breast duct and a composition capable of coating a tip of the tool, said composition comprising [at least two of an orifice-dilating agent, a vaso-dilator, a muscle-relaxing agent, a muscle-constricting agent,] a lactation-stimulating agent[, a secretion-stimulating agent, a sphincter-relaxer, an anti-ischemic agent, a calcium channel blocker,] and at least one of the following: a dye or stain to mark the nipple surface excluding ductal orifices, a dye or stain to mark a perimeter of a ductal orifice, and a dye or stain to mark a ductal orifice.

11. Cancelled.

12. (New) A system as in claim 9, further comprising a pad having a geometry sized to circumscribe a breast nipple and enclose a bioactive agent in contact with a nipple surface and cover the nipple surface so that the bioactive agent can act on the nipple surface.

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